



COMPLETE SAMPLE DELIVERY GROUP FILE (CSF)
EVIDENCE AUDIT CHECKLIST (EAC)
U.S. Environmental Protection Agency
Region 8 Superfund Program
Contract Laboratory Program (CLP)

1085984 - R8 SDMS

Route to
Validation (Y/N) _____

Case Number: 37402

SDG Number: M425E8

AUDIT CHECKLIST

Note: The following items are verified for each Region 8 CSF, except those indicated as "Complete Audit Only." As described in the Region 8 Inspection of Complete Sample Delivery Group SOP, the items identified as "Complete Audit Only" are completed on approximately 10% of the Region 8 CSFs. When items identified as "Complete Audit Only" are not reviewed, "N/A" is marked.

CHAIN OF CUSTODY

1. Custody Seal Present? Yes ☒ No _____
2. Condition of Seal? Intact ☒ Signed ☒ Broken _____ Unsigned _____
3. Chain of Custody Record(s)/Traffic Reports Present? Yes ☒ No _____
4. Chain of Custody Record(s)/Traffic Reports Signed? Yes ☒ No _____
5. Chain of Custody Record(s)/Traffic Reports Dated? Yes ☒ No _____
6. Airbill Present? Yes _____ No ☒
7. Airbill Number(s)? N/A
8. Airbill Signed? Yes N/A No _____
9. Airbill Dated? Yes N/A No _____
10. Sample Tags Present? Yes _____ No ☒
11. Sample Tags Match DC-1 (Complete Audit Only)? Yes _____ No _____ N/A ☒

FORM DC-1

12. Form DC-1 Present? Yes ☒ No _____

FORM DC-2

13. Form DC-2 Present? Yes ☒ No _____
14. Form DC-2 Reviewed by USEPA and Correct (Complete Audit Only)? Yes _____ No _____ N/A ☒

DOCUMENT CONTROL

15. Laboratory Documents Legible (*Complete Audit Only*)? Yes ☐ No ☐ N/A ☒
16. Original Documents Included in CSF (*Complete Audit Only*)? Yes ☐ No ☐ N/A ☒

DATA INSPECTION

17. Raw data present (for each analytical fraction defined by the traffic report/chain of custody record)? Yes ☒ No ☐
18. Percent Solids Form present for soil samples? Yes ☐ No ☐ N/A ☒
19. Cover Page Present? Yes ☒ No ☐
20. Records of Communication Present? Yes ☒ No ☐ N/A ☐
21. Form 1s present (for each analytical fraction defined by the traffic report/chain of custody record/cover page) (*Complete Audit Only*)? Yes ☐ No ☐ N/A ☒

ELECTRONIC DATA

22. Electronic DAT file elements received?
- | | | | |
|--------------------|---|-----------------------------|------------------------------|
| EDD | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| CCS Report | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| M/VS Report | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| Defect Code Report | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |

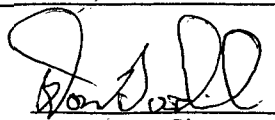
23. List RPM and contractors who received electronic DAT file:

Kathryn Hernandez - EPA
Tetra Tech

COMMENTS:

The laboratory indicated in the data package ambills and sample tags were not provided. Note the sample were hand delivered.

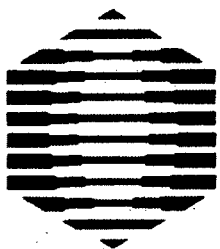
Audited By:
(As defined in the
Region 8 Inspection of
Complete Sample
Delivery Group SOP)


Signature

Don Goodrich
Print Name

Date:

9/11/2008



**DATA
CHEM**
LABORATORIES, INC.

SDG Administrative Narrative

Contract: EP-W-06-054
Case: 37402
SDG: MH25E8
Set ID No.: 8171038

Cooler # and temperatures of each (upon receipt)

Cooler Number C08-	<u>NA</u>	Arrival temperature was	<u>4</u> °C
Cooler Number C08-	<u>↓</u>	Arrival temperature was	<u>4</u> °C
Cooler Number C08-		Arrival temperature was	°C
Cooler Number C08-		Arrival temperature was	°C
Cooler Number C08-		Arrival temperature was	°C
Cooler Number C08-		Arrival temperature was	°C
Cooler Number C08-		Arrival temperature was	°C
Cooler Number C08-		Arrival temperature was	°C
Cooler Number C08-		Arrival temperature was	°C
Cooler Number C08-		Arrival temperature was	°C

7/14/08

Communications:

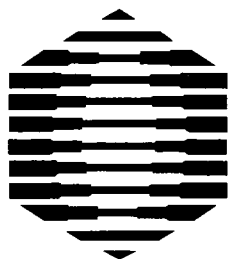
Any sample receiving issues with this SDG are fully documented through the email communications which are included as a portion of this SDG Narrative and immediately follow this page. Copies of each of these email communications are also located in the communication section of this datapackage. In addition, any analytical issues pertinent to a given fraction are fully documented by the analyst in the associated narrative for the applicable fraction.

Comments:

None.

Signature: *Luli Warden*

Date: *7/14/08*



**DATA
CHEM**
LABORATORIES, INC.

SDG NARRATIVE

Case #: 37402
SDG#: MH25E8
Contract #: EP-W-06-054
DCL Set ID#: 8171038
Modification#: 1554.1
July 14, 2008

General Information

The three samples in this SDG were analyzed by methodologies contained in ILM05.4. All concentration, analytical, and method qualifiers are defined in the SOW.

Holding Times

The samples were prepared and analyzed within method required holding times.

Initial and Continuing Calibration

All initial and continuing calibration verification and blank analyses were performed within the designated frequency and recoveries of the verifications and concentrations of the blanks met method acceptance criteria. Mod analyte aluminum fails in the CCV and Mod analyte iron fail in the CCB, due to carryover.

ICP-MS Interference Check Sample Analysis

Results for the interference check samples met method acceptance criteria.

Preparation Blanks

The absolute values of all analyte concentrations in the preparation blanks were lower than the Contract Required Quantitation Limits.

Laboratory Control Sample Analysis

Results for the analysis of the water LCS met method acceptance criteria.

Matrix Spike Analysis

A matrix spike was not prepared or analyzed due to insufficient sample volume.

Matrix Duplicate Analysis

A matrix duplicate was not prepared or analyzed due to insufficient sample volume.

ICP-MS Serial Dilution

ICP-MS Serial Dilutions results met method acceptance criteria.

Miscellaneous Comments

All calibration data is linear, please see raw data.

Cooler Temps were at 4 and 9 °C.

Issue: Samples were received with the same sample ID for TM and DM. New CLP sample IDs were received for the DM analysis.

Issue: Insufficient sample volumes were received to prepare or analyze matrix spike and matrix spike duplicate samples.

Example Equations

Method HW3: $C \times \frac{V_f}{V_i} \times DF = \text{Concentration}(\mu\text{g/L})$

C = Instrument value in $\mu\text{g/L}$ (The average of all replicate integrations).

Vf= Final digestion volume (mL)

Vi= Initial digestion volume (mL)

DF = Dilution Factor

SAMPLE LOG-IN SHEET

WM

MM 1584.1

Lab Name	DataChem Laboratories, Inc.	Page	1 of 1
Received By (Print Name)	Meredith Edwards	Log-In Date	6/19/08

Received By (Signature)	Meredith Edwards
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Case Number	37402	Sample Delivery Group No.	MH 25E8	NRAS Number	n/a
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Remarks:	EPA Sample #	Aqueous Sample pH	Corresponding		Remarks: Condition of Sample Shipment, etc.
			Sample Tag #	Assigned Lab #	
1. Custody Seal (s) Present/Absent* Intact/Broken*	MH 25 A7	4.2	U/A		TM water
	A9				
2. Custody Seal Nos.	B0				
	B1				
3. Traffic Reports/Chain of Custody Records or Packing Lists Present/Absent*	B4				
4. Airbill Airbill/Sticker Present/Absent*	B5				
	B6				
5. Airbill No.	D9				
	E8			8171038001	
6. Sample Tags Present/Absent*	F1	n/a			Metals Soil
Sample Tag Numbers Listed/Not Listed on Chain-of-Custody	MH 26 B3	4.2			TM water
7. Sample Condition Intact/Broken*/Leaking*	75				
8. Cooler Temperature Indicator Bottle Present/Absent*	77				
9. Cooler Temperature	79				
10. Does information on custody records, traffic reports, and sample tags agree? Yes/No*	85				
11. Date Received at lab	86				
12. Time Received	92				
Sample Transfer	B5				
Fraction	C8				
Area # P. 221					
By					
On					

* Contact SMO and attach record of resolution	
Reviewed By	Logbook No. NOT APPLICABLE
Date:	Logbook Page No. NOT APPLICABLE

SAMPLE LOG-IN SHEET

0594

Mod 1554.1

Lab Name DataChem Laboratories, Inc.		Page 1 of 1	
Received By (Print Name) Meredith Edwards		Log-In Date	
Received By (Signature) Meredith Edwards			
Case Number 37402		Sample Delivery Group No.	
NRAS Number		Remarks: Condition of Sample Shipment, etc.	
Remarks:	EPA Sample #	Aqueous Sample pH	Corresponding: Sample Tag # Assigned Lab #
1. Custody Seal (s) Present/Absent* Intact/Broken*	MAH 25 C0	42	n/a
	C4		
2. Custody Seal Nos. <u>n/a</u> <u>1</u>	C7		
	C8		
3. Traffic Reports/ Chain of Custody Records or Packing Lists Present/Absent*	C9		
4. Airbill Airbill/Sticker Present/Absent*	D1		
	E3		
5. Airbill No. <u>n/a</u> <u>1</u>	E4		
	E9		8/71038002
6. Sample Tags Present/Absent* Sample Tag Numbers Listed/Not Listed on Chain-of-Custody	FD		1 003
	MAH 26 94		DM water
7. Sample Condition Intact/Broken*/ Leaking*	96		
8. Cooler Temperature Indicator Bottle Present/Absent*	99		
9. Cooler Temperature <u>4</u>	A1		
10. Does information on custody records, traffic reports, and sample tags agree? Yes/No*	A3		
11. Date Received at lab <u>6/18/08</u>	A4		
12. Time Received <u>815</u>	B9		
Sample Transfer	C0		
Fraction <u>DM/DM</u>	D0		
Area # <u>P. 33-1</u>	D1		
By <u>AK</u>			
On <u>6/18/08</u>			

* Contact SMO and attach record of resolution

Reviewed By <u>Rogerne Olson</u>	Logbook No. NOT APPLICABLE
Date: <u>6/19/08</u>	Logbook Page No. NOT APPLICABLE

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME	DataChem Laboratories, Inc.		
CITY/STATE	Salt Lake City, UT 84123		
CASE NO.	37402	SDG NO.:	MH25E8
SDG NOS. TO FOLLOW	N/A		
NRAS No.	N/A		
CONTRACT NO.	EP-W-06-054		
SOW NO.	ILM05.4		

All documents delivered in the Complete SDG File must be original documents where possible.
(Reference - Exhibit B Section 2.6)

	PAGE NOS		CHECK	
	FROM	TO	LAB	REGION
1. Cover Page	1	1	✓	
2. SDG Narrative	2	3	✓	
3. Sample Log-In Sheet (DC-1)	4	5	✓	
4. Inventory Sheet (DC-2)	6	7	✓	
5. Traffic Report/Chain of Custody Record(s)	8	8	✓	
Inorganic Analysis				
6. Data Sheet (Form I-IN)	9	11	✓	
7. Initial & Continuing Calibration Verification (Form IIA-IN)	12	13	✓	
8. CRQL Standard (Form IIB-IN)	14	15	✓	
9. Blanks (Form III-IN)	16	17	✓	
10. ICP-AES Interference Check Sample (Form IVA-IN)	NA		✓	
11. ICP-MS Interference Check Sample (Form IVB-IN)	18	18	✓	
12. Matrix Spike Sample Recovery (Form VA-IN)	NA		✓	
13. Post-Digestion Spike Sample Recovery (Form VB-IN)	↓		✓	
14. Duplicates (Form VI-IN)	↓		✓	
15. Laboratory Control Sample (Form VII-IN)	19	19	✓	
16. ICP-AES and ICP-MS Serial Dilutions (Form VIII-IN)	20	20	✓	
17. Method Detection Limits (Annually) (Form IX-IN)	21	22	✓	
18. ICP-AES Interelement Correction Factors (Quarterly) Form XA-IN)	NA		✓	
19. ICP-AES Interelement Correction Factors (Quarterly) Form XB-IN)	↓		✓	
20. ICP-AES and ICP-MS Linear Ranges (Quarterly) Form XI-IN)	23	23	✓	
21. Preparation Log (Form XII-IN)	24	24	✓	

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOS		CHECK	
	FROM	TO	LAB	REGION
22. Analysis Run Log (Form XIII-IN)	25	26	✓	
23. ICP-MS Tune (Form XIV-IN)	27	27	✓	
24. ICP-MS Internal Standards Relative Intensity Summary (Form XV-IN)	28	31	✓	
25. ICP AES Raw Data	NA		✓	
26. GFAA Raw Data (If Applicable)	NA		✓	
27. ICP-MS Raw Data	32	136	✓	
28. Mercury Raw Dta	NA		✓	
29. Cyanide Raw Data	NA		✓	
30. Preparation Logs Raw Data	137	137	✓	
31. Percent Solids Determination Log	NA		✓	
32. USEPA Shipping/Receiving Documents				
Airbill (No. of Shipments _____)	138	138	✓	
Sample Tags	139	139	✓	
Sample Log-In Sheet (Lab)	NA		✓	
33. Misc. Shipping/Receiving Records				
(list all individual records)				
Telephone Logs	NA		✓	
DCL CRIR	NA		✓	
DCL SDG TR Cover Sheet	140	140	✓	
34. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
DCL Work Order	NA		✓	
DCL COC	141	141	✓	
35. Internal Original Sample Prep & Analysis Records (describe or list)				
Prep Records	142	148	✓	
Analysis Records	149	172	✓	
Description	NA		✓	
36. Other Records (describe or list)				
Telephone Communications Log	NA		✓	
E-mail Communications	173	182	✓	
			✓	
37. Comments:				

Completed by: Julie Warath
 (CLP Lab) (Signature)

Julie Warath / Doc. Ctrl.
 (Print Name & Title)

7/14/08
 (Date)

Audited By: _____
 (USEPA) (Signature)

 (Print Name & Title)

 (Date)



USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record



Case No: 37402

OAS No:

SDG No:

MH25E8

L

00

Date Shipped: 6/16/2008
Carrier Name: Hand delivered
Airbill:
Shipped to: Datchem Laboratories,
Inc.
960 West LeVoy Drive
Salt Lake City UT 84123
(801) 266-7700

Chain of Custody Record

Relinquished By (Date / Time)

1 *Ch* *6/18/08*
2
3
4

Sampler
Signature:

Received By

(Date / Time)

Received *6/18/08*

For Lab Use Only

Lab Contract No:

Unit Price:

Transfer To:

Lab Contract No:

Unit Price:

INORGANIC
SAMPLE No.

MATRIX/
SAMPLER

CONC/
TYPE

ANALYSIS/
TURNAROUND

TAG No./
PRESERVATIVE/ Bottles

STATION
LOCATION

SAMPLE COLLECT
DATE/TIME

ORGANIC
SAMPLE No.

FOR LAB USE ONLY
Sample Condition On Receipt

MH25E5	Surface Water/ Sediment	/G	DM (21), TM (21)	145, 146, 147 (3)	SC-SW-40-1	S: 6/5/2008	14:30
MH25E6	Surface Water/ Sediment	/G	DM (21), TM (21)	148, 149, 150 (3)	SC-SW-40-1	S: 6/5/2008	14:37
MH25E7	Surface Water/ Sediment	/G	DM (21), TM (21)	151, 152, 153 (3)	SC-SW-43	S: 6/6/2008	10:34
MH25E8	Surface Water/ Sediment	/G	DM (21), TM (21)	154, 155, 156 (3)	SC-SW-44	S: 6/5/2008	18:45
MH25E9	Surface Water	/G	DM (21), TM (21)	157, 158, 159 (3) (2)	SC-SW-OPP1	S: 6/5/2008	8:07
MH25F0	Surface Water	/G	DM (21), TM (21)	160, 161, 162 (3) (2)	SC-SW-OPP2	S: 6/5/2008	15:40
MH25F1	Sediment		TM TM (21)	(1)	SC-SW-20		

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 4/4/4/4/4/4	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? <input checked="" type="checkbox"/>	Shipment Iced? <input checked="" type="checkbox"/>
DM = CLP TAL Dissolved Metals, TM = CLP TAL Total Metals				

TR Number: 8-584325316-061608-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

LABORATORY COPY

TARGET SHEET
EPA REGION VIII
SUPERFUND DOCUMENT MANAGEMENT SYSTEM

DOCUMENT NUMBER: 1085984

SITE NAME: RICHARDSON FLAT TAILINGS

DOCUMENT DATE: 09/11/2008

DOCUMENT NOT SCANNED

Due to one of the following reasons:

- ☐ PHOTOGRAPHS
- ☐ 3-DIMENSIONAL
- ☐ OVERSIZED
- ☐ AUDIO/VISUAL
- ☐ PERMANENTLY BOUND DOCUMENTS
- ☐ POOR LEGIBILITY
- ☒ OTHER
- ☐ NOT AVAILABLE
- ☐ TYPES OF DOCUMENTS NOT TO BE SCANNED
(Data Packages, Data Validation, Sampling Data, CBI, Chain of Custody)

DOCUMENT DESCRIPTION:

1 - 3 1/2" Floppy - File Name MH25E8.IO1, Contract #EP-W-06-054,
Case/SDG 37402/MH25E8, 7/14/08